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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/537,452

06/03/2005

Luca Barella

DSM-01-US

3265

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7590

07/22/2009

HOXIE & ASSOCIATES LLC  
75 MAIN STREET , SUITE 301  
MILLBURN, NJ 07041

EXAMINER

WINSTON, RANDALL O

ART UNIT

PAPER NUMBER

1655

MAIL DATE

DELIVERY MODE

07/22/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/537,452	BARELLA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Randall Winston	1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 38-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 38-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Acknowledgement is made of receipt and entry of the amendment filed on 05/12/2009.

The rejection made under 35 USC 112, first paragraph, has been overcome by Applicant's amendment.

Examiner acknowledges that claims 1-37 have been cancelled and new claims 38-43 have been added.

Claims 38-43 have been examined on the merits.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 38-43 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lorant et al. (US 6623769) in view of Murad (US 5962517) and De Salvert (US 5827520) and as evidenced by Polycystic Ovarian Syndrome (website of [www.medicinenet.com/polycystic\\_ovary/article.htm](http://www.medicinenet.com/polycystic_ovary/article.htm)) for the reasons set forth in the previous OFFICE ACTION which are restated below.

Applicant claims a method of incidence risk reduction of polycystic ovary symptoms (i.e. acne is a polycystic ovary symptom associated with androgen signaling) associated with androgen signaling comprising administering an effective amount of

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lycopene and further comprising vitamin e and vitamin c whereas the claimed active ingredients of lycopene, vitamin e and vitamin c are administered in various amounts.

Lorant teaches an effective amount of lycopene is orally administered to a subject in need thereof to treat acne (i.e. as evidence by the article of Polycystic Ovarian Syndrome, Polycystic Ovarian Syndrome discloses that a symptom of polycystic ovarian syndrome is acne) associated with androgen signaling (please note that Applicant also readily admits within his specification on page 7 lines 27-29 that acne is also a disorder associated with androgen signaling). Moreover, when Lorant same lycopene as the claimed invention's lycopene is orally administered in effective amounts within a subject in need of's body to treat acne whereas acne is well known to be a symptom of polycystic ovarian syndrome, Lorant's same lyocopene as the claimed invention's lycopene would also intrinsically have the same underlining claimed functional effect as the claimed invention when administered to a subject in need thereof (i.e. the functional effect of incidence risk reduction of a polycystic ovary symptom such as acne associated with androgen signaling from polycystic ovarian syndrome) (see, e.g. entire patent including column 3 lines 5-10 and page 7 lines 27-29). Lorant does not expressly teach the combination of lycopene, vitamin e and vitamin c administered to a subject in thereof for risk reduction of polycystic ovary symptom such as acne associated with androgen signaling.

Murad beneficially teaches vitamin e treats disorders associated with androgen signaling such as acne (see, e.g. entire patent including column 3 lines 1-10).

De Salvert beneficially teaches vitamin c treats disorders associated with androgen signaling such as acne (see, e.g. entire patent including column 4 lines 50-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Lorant to include the claimed active ingredients of vitamin e and vitamin c as taught by Murad and De Salvert within Lorant's method teachings because the above combined reference as a whole would create the claimed invention of method of incidence risk reduction of a polycystic ovary symptom such as acne associate with androgen signaling which comprises administering to a subject in need of an effective amount of the combination of lycopene, vitamin e and vitamin c. Moreover, as discussed in MPEP Section 2114.06, "it is prima facie obvious to combine two or more compositions each of which is taught by the prior art to be useful for the same purpose (i.e. to treat acne), in order to form a third composition to be used for the same purpose" Furthermore, the adjustment of other conventional working conditions (e.g. determining suitable amounts/ranges of each active ingredient within the claimed composition and the amounts and times per day the claimed composition's method is administered), is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

Accordingly, the claimed invention was prima facie obvious to one of ordinary skill in the art at the time the invention was made, especially in the absence of evidence to the contrary.

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Applicant's argument has been carefully considered but it is not deemed persuasive. Applicant argues that none of references, either alone or in combination, teach or suggest the use of lycopene for risk reduction of polycystic ovary symptom associated with androgen signaling.

Although Applicant argues that that none of references, either alone or in combination, teach or suggest the use of lycopene for risk reduction of polycystic ovary symptom associated with androgen signaling, Applicant argument is not found persuasive because Lorant teaches an effective amount of lycopene is orally administered to a subject in need thereof to treat acne (i.e. as evidence by the article of Polycystic Ovarian Syndrome, Polycystic Ovarian Syndrome discloses that a symptom of polycystic ovarian syndrome is acne) associated with androgen signaling. Lorant does not expressly teach the combination of lycopene and vitamin c administered to a subject in thereof for risk reduction of polycystic ovary symptom such as acne associated with androgen signaling. However, Murad and De Salvert are referenced by examiner to remedy Lorant's deficiency. Murad beneficially teaches vitamin e treats disorders associated with androgen signaling such as acne and De Salvert beneficially teaches vitamin c treats disorders associated with androgen signaling such as acne. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Lorant to include the claimed active ingredients of vitamin e and vitamin c as taught by Murad and De Salvert within Lorant's method teachings because the above combined reference as a whole would create the claimed invention of method of incidence risk reduction of a polycystic ovary symptom

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such as acne associate with androgen signaling which comprises administering to a subject in need of an effective amount of the combination of lycopene, vitamin e and vitamin c.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Conclusion***

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Winston whose telephone number is 571-272-0972. The examiner can normally be reached on 8AM-5PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RW

/Christopher R. Tate/  
Primary Examiner, Art Unit 1655